STATE GUIDELINES FOR LOCAL PLANNING IN THE COASTAL AREA

UNDER

THE COASTAL AREA MANAGEMENT ACT OF 1974

ADOPTED BY

THE COASTAL RESOURCES COMMISSION

ON JANUARY 27, 1975

AND

PROMULGATED IN ACCORDANCE WITH THE PROVISIONS OF

G.S. 113A-107(e)

OF THE

COASTAL AREA MANAGEMENT ACT OF 1974

FOREWORD

These State Guidelines for Local Planning as required in the Coastal Area Management Act of 1974 are divided into three parts:

I. THE SUMMARY -- is designed for the use of public officials throughout the coastal counties who are responsible for the development of local land use plans, and for the information of all citizens of the coastal area. It is intended for wide distribution.

II. THE LAND USE PLAN -- is for the use of professional planners and others engaged in the collection and analysis of data, supervision of the planning process, and the detailed work of putting the plan in final form. It is intended for more limited distribution.

III. GUIDELINES FOR AREAS OF ENVIRONMENTAL CONCERN -- is to assure that such areas are included in the land use planning process. It is also for the use of professional planners and is intended for more limited distribution.

These Guidelines have been prepared by the North Carolina Coastal Resources Commission with assistance from the State Planning Office, several divisions of the State Department of Natural and Economic Resources, the Land Policy Council, the Institute of Government and Sea Grant Program at UNC, the Coastal Resources Advisory Council, Lead Regional Organizations in the coastal area, local government officials in coastal counties and municipalities and their professional planning staffs and consultants, other federal and state agency representatives with special interests in coastal planning, and numerous citizens and organizations throughout the 20-county coastal area of North Carolina.

Glossary

The following abbreviations are used in the Guidelines:

AECs	-	Areas of Environmental Concern
CAMA	-	Coastal Area Management Act of 1974
CRC	-	Coastal Resources Commission
DNER	-	Department of Natural and Economic Resources
LRO	-	Lead Regional Organizations

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III. GUIDELINES FOR AREAS OF ENVIRONMENTAL CONCERN

I. THE SUMMARY

"State Guidelines for the coastal area shall consist of statements of objectives, policies, and standards to be followed in public and private use of land and water areas within the coastal area." (Coastal Area Management Act of 1974. G.S.113A-107 (a))

A. Objectives

The purpose of these State Guidelines is to assist local governments in each of the 20 coastal area counties with the preparation of their own individual land use plans.

Each county and each city or town within a coastal county is encouraged to develop a plan which reflects the desires, needs and best judgement of the citizens residing within its boundaries.

When completed these 20 individual county land use plans will form the basis for a "comprehensive plan for the protection, preservation, orderly development, and management of the coastal area of North Carolina", which is the primary objective of the Coastal Area Management Act of 1974.

It is, therefore, essential that each of the municipal plans and each of the 20 county plans not only take into consideration the geography, the economy and the traditional life style of the local area, but is also in harmony with the plans developed by the other 19 coastal counties and takes into consideration both state and national interests.

In this way the people of the coastal area, working through their local officials and with the assistance of professionally trained specialists, can realize the goals of the Coastal Area Management Act of 1974.

A problem arises at the very outset, however, because the Coastal Area Management Act is such a detailed and lengthy document few coastal residents have read it, and fewer still have studied it sufficiently to fully understand it.

Yet, the Act requires the development and adoption of a land use plan for each county in the coastal area, and further requires that each county plan conform to State Guidelines, which in turn "shall be consistent with the goals of the coastal area management system," as set forth in that first part of the Act.

Thus it is essential for any local official or any coastal citizen involved in developing a local land use plan to understand the legislative goals of the management system as stated in G.S. 113A-102(b). Briefly, they are:

1. To provide a management system capable of preserving and managing the natural ecological conditions of the estuarine system, the barrier dune system, and the beaches, so as to safeguard and perpetuate their natural producitivity and their biological, economic and aesthetic values.

2. To insure that the development or preservation of the land and water resources of the coastal area proceeds in a manner consistent with the capability of the land and water for development, use, or preservation based on ecological considerations.

3. To insure the orderly and balanced use and preservation of our coastal resources on behalf of the people of North Carolina and the nation.

4. To establish policies, guidelines and standards for the conservation of resources; the economic development of the coastal area; the use of recreational lands and tourist facilities; the wise development of transportation and circulation patterns; the preservation and enhancement of historical, cultural and scientific aspects of the region; and the protection of common law and public rights in the lands and waters of the coastal area.

B. Policies

The basic policy decisions in any effective program of county-wide land use planning must be made within the county -- by people familiar with local tradition, local problems and local desires for the future.

Though the final determination of policy is the responsibility of the elected officials, the process extends far beyond the courthouse. Within the structure of county government the Planning Board is obviously involved, though it is equally important to have input in their areas of special knowledge from all other agencies of government ranging from the Sheriff, Tax Supervisor and Tax Collector to the Board of Education and school administrators, and the Health & Social Services departments.

Equally important is the involvement of the city council, and of departments, boards and commissions of each incorporated municipality, not just with regard to the lands within their city limits, but in adjoining areas as well.

Finally, it is important to secure the views of a wide cross section of citizens, representing not only each different geographical area of the county, but those who can ably represent the varying economic, social, ethnic, and cultural interests as well.

Once widespread local input is assured, the task becomes one of indentifying those matters on which local value judgements are needed.

In any community there is a drive for growth and

changes which can provide the facilities, services and strengthened economic base which most people equate with a full and happy life. At the same time there is mounting concern over human meddling with the ecological balance. And many tend to prefer the environment in which they were reared in coastal North Carolina to the more frenzied and complex life style of more urbanized sections of the country. Each of these factors must be weighed carefully before decisions can be made which will help shape the form of life for generations yet unborn.

For example, if a large part of the land in a coastal county has been put to use as farmland, with the result that agriculture has been the mainstay of the economy for generations, then the decision must be made whether to retain this traditional emphasis on farming; or to allow limited industrial expansion; or to abandon the agricultural base entirely. The same considerations apply in areas where commercial fishing, forestry or tourism have figured prominently as an economic base.

The very fact that coastal North Carolina has such an extensive shoreline, along the sounds, rivers and bays as well as the Atlantic Ocean, has brought extreme pressures in recent years to accommodate the growing numbers of tourists and summer residents drawn to the area. Yet at the same time that many coastal communities have experienced the benefits of the flow of tourist oriented dollars, they have most often been affected as much by

the attendant problems of providing water, waste disposal facilities, roads, police protection and numerous other services, unthought of a few years back, for the growing throngs.

These are the questions which must be decided locally using land use planning as the basic tool. A key factor to bear in mind at all times in this process is the number of people the local area wants to accommodate eventually. If planning in a particular area is geared to handle a population of one hundred thousand people, and through the course of time that number take up residence, then there is a good chance of coping with the problems attendant on growth. But if a million people eventually show up in an area geared to handle one-tenth of that number, then the whole planning process will have been useless.

It should be borne in mind throughout the planning process that the county and municipal plans must take into consideration not only local and area needs, but state and national interests as well.

Fortunately for local governments, given the restraints of available time and funds, one important matter of policy throughout the coastal area was determined by the General Assembly when the Coastal Area Management Act of 1974 was enacted into law. This was the specific instruction to the Coastal Resources Commission to identify critical areas which need to be considered for protection and possible preservation in each county; and to formally designate them as "Areas of Environmental

Concern", in which any proposed development, change or other use of the land will be subject to review before permits for development are granted. Once these Areas of Environmental Concern have been proposed, after extensive review by local authorities and by the public, they will be designated by the Commission for inclusion in each county-wide plan.

Simply stated, the ultimate policy decision is how to achieve responsible and needed growth within the capacity of the land and adjacent waters to sustain it. The framers of the Coastal Area Management Act of 1974 deliberately placed this decision in local hands.

When properly carried forward the land use planning process never ceases, for it is continually affected by changes in population, economics, technological development and life style. As an obvious example, any land use plan developed before the invention of the automobile would have to be revised drastically to take into consideration the need for highways and the impact of motor vehicles on the way people live and how they earn their living.

Each of the local land use plans called for in the Coastal Area Management Act of 1974, therefore, can be no more than a foundation to which future planning can be added in the light of our rapidly changing environment.

The Coastal Resources Commission recognizes this, and recognizes also the problems resulting from the required time schedule for completion of local plans, and the

limitations on available funding. But the Commission is equally aware that this entire effort will have been wasted if each local government does not produce a land use plan which will serve as a solid foundation for the future.

C. Standards

Traditionally the process of developing a land use plan begins with the collection of a vast amount of data, ranging from figures on population and income to maps showing topography, soil classification and current land uses.

This is generally followed by a detailed analysis of the collected data, the development of local objectives, preparation of new maps, and the drawing up of plans and budgets for the construction of new facilities to accommodate the projected expansion and growth.

It is a time consuming procedure, the culmination of which most often is the printing of thick documents containing a mass of written material, maps and charts. Unfortunately these are infrequently read, and seldom studied and implemented, and in many cases they end up stored in the basement of the courthouse for posterity -- or the trash collector.

The Coastal Area Management Act does not provide sufficient time for the local governments of coastal North Carolina to follow these traditional land use planning practices if they are to complete their basic plans by the November, 1975 deadline.

Neither does the Coastal Resources Commission want any local government to go through the motions of preparing a traditional but relatively meaningless plan just to conform to the requirements of the Act and these Guidelines.

Therefore, every effort has been made in these Guidelines to rearrange, simplify and streamline the procedures, so that none of the 20 coastal counties will be required to do more during the course of the 1975 planning effort than it can realistically expect to accomplish in that period of time.

The basic objective, in short, is for each local governmental unit in the coastal area to determine its long-range development goals and translate these into clearly understandable written descriptions and maps which will serve as a firm foundation and practical guide for all future planning and development.

Specifics of this planning process are dealt with in the following eleven sub-sections:

1. Developing Goals

From the outset the emphasis of the citizen planners -- County Commissioners, city officials, Planning Board members and citizens serving on advisory committees -- should be directed toward formulating the local development plan. This calls first for the involvement of a large segment of the citizens in determining what they want their area to be like for future generations, and finally for value judgements by the local governing body

in the process of articulating the goals.

Only when these general policies and goals have been set will the planning process move into the area of data analysis, map preparation and development of the specifics of the plan.

2. Organizing the Team

In any area, county or city, the team setting out to put together an understandable and meaningful land use plan must consist of a number of elements:

(a) The Local Elected Officials. They head the team and most often delegate direct responsibility to the Planning Board, but retain final authority for approval of the plan.

(b) The Planning Board. It should be composed of individuals representative of different backgrounds, interests and geographic areas. A successful Planning Board directs the planning operation, with the assistance of the planning staff or consultants, and this calls for extensive study and continuing involvement in the process by all members. Individuals not able or willing to devote a large part of their time to this public service activity during 1975 will do a disservice to their counties and their fellow citizens by being Planning Board members in name only.

(c) The Coastal Resources Advisory Council Members. These are local citizens whose role on the planning team is liaison with the Coastal Resources Commission.

(d) Professional Planners. Whether on salary or under contract, they are paid to assemble data, analyze information, identify problems, prepare maps, charts and background reports, and provide assistance and professional guidance to the citizen planners. It is not their job to make policy decisions, or to dominate the planning process.

A number of coastal counties, municipalities and special districts already have various plans and studies which contain extensive data pertinent to the planning process.

In addition, considerable additional data has been assembled since the CAMA became effective July 1, 1974, and local planning staffs will continue the process of accumulating maps, written material and statistics as the plan develops. Much of this material will come, without local effort or expense, from the CRC, DNER, other departments of State Government, and agencies of the Federal Government.

(e) Representatives of Local Public Agencies. The experience and knowledge of these officials and department heads can add immeasureably to the planning process as well as helping to insure that the land use decisions they make in their own activities are consistent with county-wide goals and policies. The most effective way to involve representatives of the various agencies within the county is to have them serve on an advisory council which meets on a regular basis.

Coordination between county and city governments is perhaps of even greater importance and is discussed in more detail in section 4 of the Standards.

(f) State and Federal Agencies. Especially in counties which have extensive State and Federal installations or land holdings it is important to involve all agencies with a direct interest or expertise in local land use problems. Obvious examples are the National Park Service, defense installations, and the State divisions of parks and of forests. In all counties there is involvement by other agencies, especially those concerned with dredge and fill applications and other permits.

(g) Citizens. Their involvement is probably the most essential ingredient of a successful land use planning program. Not only is it difficult, if not impossible, for a handful of elected officials and planners to develop a long range land use plan which fully reflects the desires and needs of all citizens, but it has been proven time and again that when citizens are not directly involved in the planning they are reluctant to support the actions and funding required for future implementation.

Citizens can be involved in two different ways. First, some counties already have formed county-wide Advisory Committees, working with their planning boards and planners on a continuing basis. Second, it is essential to involve a large segment of the citizens throughout the county as described in Section 3 of the Standards.

3. Achieving Public Participation

Because of the importance of public participation in land use planning the Commisson has prepared a special Handbook for Elected Officials on Public Participation in the Development of Land Use Plans in the Coastal Areas of North Carolina for separate publication and extensive distribution to all involved or interested citizens.

The Handbook contains detailed descriptions of methods which have proven effective elsewhere in each of the two basic steps necessary for effective public participation -- first Informing the Public, and then getting Public Involvement in the planning program.

Before approval of any land use plan the Commission will require that the plan include a statement outlining the methods employed in securing public participation -- and the degree of that participation.

4. Effecting County - City Relationships

In the final analysis the individual plans for the municipalities are an important part of the overall county plan. It is imperative to devise some method for having representatives of municipalities serve on a permanent advisory council.

The relationship of cities to counties, and of counties to cities, is one not fully defined in the Coastal Area Management Act. Many additional questions will arise which are not covered in the CAMA and cannot be anticipated in these guidelines.

Specific questions on coordination must therefore be worked out locally.

Already, in some counties, a close working relationship is being developed between the county and city planning boards, and similar coordination and cooperation is essential to the planning process throughout the coastal area.

Just as it will be the responsibility of the CRC to mesh the individual plans from all 20 counties into a single comprehensive plan for the entire coastal area of North Carolina, it is the responsibility of local governments within each county to combine their plans into a single comprehensive county-wide plan.

The official policy of the Commission on county-city planning relationships is as follows:

"It is the policy of this Commission that in every instance city plans shall be considered as integral parts of the county plans."

"It is the further policy of this Commission to encourage cities which so desire to develop their own land use plans, carefully coordinated with county plans prepared in the manner provided in the Coastal Area Management Act of 1974."

To implement this policy the CRC recommended, and the Secretary of DNER has authorized, the allocation of grant funds to qualifying cities for this purpose.

Further, the Commission and the Coastal Resources Advisory Council are available to work with local

governments in developing cooperative programs.

5. Preparing a Time Schedule

The CAMA provides that the Commission must adopt these guidelines no later than January 27, 1975, and that each locality must complete the preparation and adoption of its land use plan within 300 days thereafter. The effective date for these Guidelines is January 27, 1975, which means that the local plans must be adopted by November 23, 1975.

This is a tight schedule, made even tighter by the CAMA requirement that a public hearing be held prior to plan adoption, and that copies of the proposed plan must be available for public inspection 30 days before the hearing.

The CRC has identified a few key dates by which times local governments will have completed certain actions in the planning process and these are listed below. Each local government will need to prepare a detailed work program based on their particular situation which adheres to these few key dates and submit it to the CRC for review early in the planning process.

March 1, 1975 - Submit to the CRC a detailed work program which includes:

1) a Public Participation section which describes when and how the public is to be involved throughout the planning process (See the Handbook for Elected Officials on Public Participation in the Development of Land Use Plans in the Coastal Areas of North Carolina for suggestions).

2) a County-City coordination section which describes how these planning programs will be integrated.

3) a time schedule to insure completion and submission of the Adopted Plan to the CRC by November 23, 1975.

August 1, 1975 - The development of local goals should have progressed sufficiently to begin the preparation of the written part of the plan.

October 1, 1975 - The proposed plan should be completed, for review by the local officials and appropriate agencies. A copy of the proposed plan should be mailed to the Commission.

October 10, 1975 - The proposed plan must be completed and be circulated for formal review. Hearing notification must be published in a newspaper of general circulation in the planning area giving the date, time and place of the hearing.

November 10, 1975 - One joint public hearing must be held no later than this date where the county plan (and one or more city plans if applicable) are presented and receive comments.

November 11, 1975 - Work should begin on making final changes in the plan, including those resulting from the public hearing.

November 23, 1975 - This is the deadline for adoption of the plan.

November 24, 1975 - A certified copy of the adopted plan shall be delivered to the Commission.

December 1, 1975 - Twenty additional copies of the plan shall be delivered to the Commission, 15 for the individual commissioners and five for staff review.

6. Protecting Areas of Environmental Concern

"They (State Guidelines) shall give particular attention to the nature of development which shall be appropriate within the various types of areas of environmental concern that may be designated by the Commission." (Coastal Area Management Act of 1974 G.S.113A-107 (a))

The Act contains detailed procedures to be followed by the Coastal Resources Commission and others before Areas of Environmental Concern can be designated -- but

no time schedule or deadline is included.

The first step in the AEC process -- identifying "Interim" Areas of Environmental Concern -- was begun in the summer of 1974 and will not be completed until after adoption of these Guidelines.

The final steps required by the Act are even more time consuming, which means there is little likelihood that permanent Areas of Environmental Concern could be designated by the Commission until after the deadline for completion of local land use plans in November, 1975.

The Commission has, however, developed land use standards to insure that potential AECs are adequately considered in the land use planning process. These standards, which are set forth in Part III, clearly define each area and establish policy objectives and general standards for their appropriate use. They are intended for use in the preparation of local land use plans. More detailed standards and criteria to be used in permit letting will be published at a later date as an amendment to these Guidelines.

7. Preparing the Plan -- Format and Content

"A land use plan for a county shall .....consist of statements of objectives, policies, and standards to be followed in public and private use of land within the county, which shall be supplemented by maps showing the appropriate location of particular types of land or water use and their relationship to each other and to public facilities.....(It shall contain) specific criteria for particular types of land or water use in particular areas.....(and) give special attention to the protection and appropriate development of areas of environmental concern..." (Coastal Area Management Act of 1974.G.S.113A-110 (a))

So long as the above directives from the Act are followed the Commission has wide latitude in establishing

guidelines for what an acceptable land use plan shall consist of, and for the form it should take. The Commission is exercising that latitude by departing from conventional land use plan concepts and calling instead for simplicity and innovation in these Guidelines with the conviction that the resultant plans will be brief and understandable, and thus practical and meaningful.

An approved plan shall consist of two documents, one being a complete Land Use Plan for limited distribution to those who will be involved in implementation and follow-up, and the other a concise Synopsis for wide distribution to the public.

The Synopsis shall contain a clear summation of the essential elements of the long range land use program prepared by the citizens. The complete Land Use Plan shall contain the Synopsis, supplemented by considerable additional detail and back-up information.

Both the Synopsis and the complete Land Use Plan shall be adopted by the local governing body on or before November 23, 1975, and submitted to the Coastal Resources Commission. These two documents represent only the beginning of a continuing planning process, and the Commission anticipates that additional studies will be necessary to strengthen and implement the plan. Local governments are encouraged to forward these additional planning documents to the Commission as they are developed.

a. Synopsis

The written text of the Synopsis shall be no more than 20 double-spaced typewritten pages in length.

It shall contain an identification of the major land use issues or problems in the area, a clear statement of land use goals and objectives, and an explanation of how and why the long range goals were developed. This should be backed up with a summary of past and present land use conditions and trends.

Particular attention should be given to the capability of the land to sustain whatever growth is called for, with emphasis on the limitations of the natural resources of the area. Mention should be made also of projected changes in population, 5, 10, 25 and 50 years in the future, with attention given to the type of services needed to accommodate such growth.

The written Synopsis shall also contain an explanation of the Land Classification Map with special attention to the relationship between cities and the county.

A separate section shall list and describe Areas of Environmental Concern, stressing their relationship to adjacent areas, and appropriate land uses.

Finally the written Synopsis shall contain a concise explanation of the steps which will be required in the future for implementation of the plan; a method for providing periodic review and revision in the light of changes in life style, the environment and economic pressures; and a proposed method for widespread distribution of the Synopsis.

b. The Complete Land Use Plan

Details on the contents of the Land Use Plan are given in Part II of these Guidelines.

8. Classifying Land

A simplified land classification system for the coastal area has been adopted by the CRC after concurrence with the State Land Policy Council. It consists of five classes of land, which shall be employed by counties in their land use plans:

a. DEVELOPED - Lands where existing population density is moderate to high and where there are a variety of land uses which have the necessary public services.

b. TRANSITION - Lands where local government plans to accommodate moderate to high density development during the following ten year period and necessary public services will be provided to accommodate that growth.

c. COMMUNITY - Lands where low density development is grouped in existing settlements or will occur in such settlements during the following ten year period and which will not require extensive public services now or in the future.

d. RURAL - Lands whose highest use is for agriculture, forestry, mining, water supply, etc., based on their natural resource potential. Also included are lands for future needs not currently recognized.

e. CONSERVATION - Fragile, hazard and other lands necessary to maintain a healthy natural environment and necessary to provide for the public health, safety, or welfare.

9. Reviewing and Approving the Plan

Each plan will be reviewed carefully by the Commission and staff as soon as possible after receipt. In compliance with the CAMA interested persons will be given the opportunity to present objections or comments, in writing, within 30 days after the date of approval by the local governing body.

Within 45 days after receipt of the local plan the Commission will either approve the plan or notify the county of the specific changes which must be made in order for it to be approved.

10. Distributing the Plan

Every effort should be made to provide a copy of the Synopsis of the Land Use Plan for each citizen in the county.

It is recommended that the county arrange to mail a copy of the Synopsis to each listed taxpayer during the calendar year of 1976. This can be enclosed with the annual tax bill, though it would be preferable to provide for an earlier mailing.

Alternative methods of accomplishing widespread distribution should be proposed to the Commission when the approved plan is forwarded.

11. The Continuing Planning Process

Too frequently in the past counties and municipalities, in North Carolina and elsewhere, have expended considerable effort and public funds in developing land use plans, and then shelved them.

In many instances a root cause for failure to implement such a plan has been the fact that there was inadequate citizen involvement -- first in not being informed of the problems; second in not becoming actively involved in the planning process; and finally in not being familiar with the plan once it was completed.

An equally pertinent reason for non-implementation is the process by which County Commissioners and

municipal officials are elected, and Planning Board members are appointed. Too often, by the time a plan has been completed and printed the individuals who worked hardest on it are no longer in office, and their successors have their hands full familiarizing themselves with their new jobs and current problems.

This is the first attempt in North Carolina, and apparently in any of the other 49 states, to provide for the development of land use plans simultaneously by a large number of counties and municipalities in a large geographic area.

It gives the CRC and local government in coastal North Carolina a unique opportunity to develop land use plans which can serve as a standard for numerous other areas to follow.

Thus it is imperative for each involved agency of local government to devise the most practical and applicable methods for insuring that the 1975 Land Use Plan will be implemented and not shelved.

II. THE LAND USE PLAN

A. Introduction

The land use plan shall contain the following basic elements:

1) A statement of Local Land Use Issues, Goals and Objectives;
2) A summary of Data Collection and Analysis;
3) A Land Classification Map;
4) Written text describing and indicating appropriate development for Areas of Environmental Concern (with supplemental maps where possible).

The constraints imposed by statutory time schedules will require the land use plans produced under the provisions of the Coastal Area Management Act to be basic, simplified documents. These four elements represent a minimum level of planning necessary to fulfill the objectives of the Act. Counties and municipalities are encouraged to use these minimum guidelines as a foundation from which to establish a more comprehensive planning and management process.

While the Land Classification System permits a general expression of future development patterns, some counties and municipalities (particularly the more urbanized ones) may find it useful to formulate a detailed land use map as well as the land classification map. Those desiring to take this additional step are encouraged to do so, and to submit to the Commission the detailed land use map in support of the land classification map.

The local land use plan, including the land classification maps, must be updated every five years. If any local plans and maps are not updated by the local planning unit and submitted for reapproval to the Coastal Resources Commission

by the end of six years, the plans and maps become void and updated plans and maps will be prepared by the CRC for use in that local area.

B. Statement of Local Land Use Issues, Goals, and Objectives

The local planning unit shall, in cooperation with its citizens and all relevant public agencies, identify the major land use issues facing the planning area and formulate a series of goals and objectives to help guide future development. The major land use issues which will be faced during the following ten year period should be identified and analyzed. Such issues should include:

1) The impact of population and economic trends;
2) The provision of adequate housing and other services;
3) The conservation of productive natural resources;
4) The protection of important natural environments;
5) The protection of cultural and historic resources.

Alternative approaches for dealing with these issues and their respective implications should then be considered in the development of land use goals, objectives and policies. These clearly stated goals, objectives and policies should serve as a guide to classifying land areas as well as clearly establishing priorities for action during the planning period. While the emphasis is to be on setting priorities for the ten year period, eventual population projections for 5, 10, 25 and 50 years in the future shall be defined consistent with the desires of the people and the capability of the land and adjacent waters to sustain them. Consideration shall be given to the type and cost of services needed to accommodate those population projections and to the ability of the local

economy to finance such services. It is recognized that projections for 25 and especially 50 years may not be very accurate, but even a rough projection can provide a long-range perspective on growth.

A brief description shall also be given of the process used to determine issues and arrive at local goals, objectives and policies with particular attention given to the participation of the public and relevant public agencies.

C. Data Collection and Analysis

The data collection and analysis items detailed below are designed to encourage consistency in the planning efforts of the coastal counties to facilitate the Commission's review of the plans. They have been formulated so as not to place a large burden on the planning resources of the localities. The requirements can generally be fulfilled by utilizing existing local plans and studies as well as information provided by regional planning bodies and State agencies. The items set forth here provide the basic information necessary to initiate an effective planning process, to assist in formulating local objectives, and to prepare a land classification map. Those counties and municipalities desiring to be more detailed or comprehensive than these guidelines suggest are encouraged to do so. Figure I briefly sets forth the required items and illustrates possibilities for additional planning studies.

The process suggested by the data items outlined below begins with an examination of the present situation. An estimate is then made of what land use demands are likely to

FIGURE 1

REQUIRED AND OPTIONAL DATA ANALYSIS ITEMS

ELEMENT	*REQUIRED*	*OPTIONAL*
1. PRESENT CONDITIONS:		
a. Population and Economy	Brief analysis, utilizing existing information.	More detailed analyses relating to human resources (population composition, migration rates, educational attainment, etc.) and economic development factors (labor force characteristics, market structure, employment mix, etc.).
b. Existing Land Use	Mapped at generalized categories, Figure II.	Mapped with more detailed categories including more detailed analyses, building inventory, etc.
c. Current Plans, Policies, and Regulations		
1) Plans & Policies	1) Listing and summary.	1) Detailed impact analysis of plans & policies upon land development patterns.
2) Local Regulations	2) Listing and description of their enforcement mechanism.	2) Detailed assessment of adequacy and degree of enforcement.
3) Federal & State Regulations	3) Listing and summary (to be provided by N. C. Dept. of Natural & Economic Resources).	
2. CONSTRAINTS:		
a. Land Potential		
1) Physical Limitations	1) Analysis of following factors (maps if information available): • Hazard Areas • Areas with soil limitations • Sources of water supply • Steep slopes	1) Detailed analysis and mapping of required items. Analysis and mapping of additional factors: • Water quality limited areas • Air quality limited areas • Others as appropriate
2) Fragile Areas	2) Analysis of following factors (maps if information available): • Wetlands • Frontal Dunes • Beaches • Prime wildlife habitats • Scenic and Prominant High Points • Unique Natural Areas • Other Surface Waters • Fragile Areas	2) Detailed analysis and mapping of required items. Analysis and mapping of additional factors.
3) Areas with Resource Potential	3) Analysis of following factors (maps if information available): • Areas well-suited for woodland management • Productive and unique agricultural lands • Mineral sites • Publicly-owned forests, parks, fish and game lands, and other outdoor recreational lands • Privately-owned wildlife sanctuaries	3) Detailed analysis and mapping of required items Analysis and mapping of additional factors: • Areas with potential for commercial wildlife management • Outdoor recreation sites • Scenic and tourist resources
b. Capacity of Community Facilities	• Identification of existing water and sewer service areas • Design capacity of water treatment plant, sewage treatment plant, schools, and primary roads • Per cent utilization of the above	Detailed community facilities studies or plans (housing, transportation, recreation, water and sewer, police, fire, etc.).
3. ESTIMATED DEMAND:		
a. Population and Economy		
1) Population	1) 10-yr. estimates based upon Dept. of Administration figures as appropriate.	1) Detailed estimate and analysis, adapted to local conditions using Department of Administration model.
2) Economy	2) Identification of major trends and factors in the economy.	2) Detailed economic studies.
b. Future Land Needs	Gross 10-yr. estimate allocated to appropriate Land Classes.	Detailed estimates by specific land use category (commercial, residential, industrial, etc.).
c. Community Facilities Demand	Consideration of basic facilities needed to service estimated growth.	Estimates of demands and costs for some or all community facilities and services.

be placed on the planning area during the ensuing ten year period, based upon population and economic projections and upon local objectives. The implications of the projected future are examined and balanced against the suitability of the lands within the county for development and the capability of government to provide basic public services and facilities. The final step in the process is land classification, which involves determining which lands within the county are to be developed with urban services, which are to continue growing as small communities, which are to be used for rural productive purposes, and which are to be conserved and left largely undeveloped.

The Summary of the Data Collection and Analysis submitted as part of the land use plan shall include map(s) and text indicating the manner in which the data was assembled and analyzed along with a statement of the major conclusions. This Summary shall also demonstrate that each data item discussed below was considered in formulating the plan, based upon the best available information. Base maps to be used for displaying the data and for preparing the land classification map will be provided by the Department of Natural and Economic Resources.

1. Present Conditions

a. Present Population and Economy

A brief analysis of the local population and economy shall be made, utilizing existing information. Particular attention should be given to the impact of seasonal populations and to economic activities

which utilize, are dependent upon, or which may impair coastal land and water resources.

b. Existing Land Use

Existing land use shall be mapped and analyzed, with particular attention given to:

1) Significant land use compatibility problems;
2) Major problems which have resulted from unplanned development, and which have implications for future land use;
3) An identification of areas experiencing or likely to experience major changes in predominant land uses.
4) Areas of Environmental Concern.

Because of the benefit uniformity will provide in maps of existing land use, the generalized categories and color coding set forth in Figure II shall be used. These categories are generalized and are designed to be compatible with those suggested by the U.S. Department of Interior. The use of more detailed breakdowns of these basic categories is encouraged if appropriate.

c. Current Plans, Policies and Regulations

This element shall contain:

1) A listing and summary of existing plans and policies having significant implications for land use, including at least transportation plans, community facilities plans, utilities extension policies, open space and recreation policies, and prior land use plans and policies.
2) A listing and brief description of the means for enforcement of all existing local land use regulations. The following regulations shall be discussed, where applicable: zoning ordinance (including amendments), subdivision regulations, floodway ordinance, building codes, septic tank regulations, historic districts, nuisance regulations, dune protection, sedimentation codes, and environmental impact statement ordinances.

FIGURE II

GENERALIZED CATEGORIES FOR RECORDING EXISTING LAND USE

CATEGORY	COLOR CODE
URBAN AND BUILT-UP	
Residential*	Yellow
Commercial	Red
Industrial	Violet
Transportation, Communication, and Utilities	Grey
Government and Institutional	Dark Blue
Cultural, Entertainment, and Recreation	Green
Undeveloped Land	White
AGRICULTURE	Brown Hatched
FORESTLAND	Green Hatched
WATER	Light Blue
WETLAND	Light Blue Hatched
BARREN (including beaches, surface extraction and cleared transitional land)	Brown

Note

*Where it is desirable to further break down the residential category by density or dwelling unit characteristics it is suggested that shades of yellow and orange be used.

3) A listing and summary of relevant State and Federal regulations affecting coastal land and water resources (to be provided by the Department of Natural and Economic Resources).

2. Constraints

a. Land Suitability

An analysis shall be made of the general suitability of the undeveloped lands within the planning area for development, with consideration given to the following factors:

1) Physical Limitations for Development;
2) Fragile Areas;
3) Areas with Resource Potential.

These factors shall be analyzed, and where possible mapped, based upon the best information available.

The major purpose of this analysis is to assist in preparing the land classification map. It is recognized, however, that some of the areas identified as a result of the land suitability analysis may be designated Areas of Environmental Concern. Any areas so designated as AECs shall be subject to the detailed requirements of Section III of these Guidelines in addition to the analysis carried out under this subsection.

1) Physical Limitations for Development

An identification shall be made of areas likely to have conditions making development costly or causing undesirable consequences if developed. The following areas shall be identified:

(a) Hazard Areas, including the following:

(1) Man-made (for example, airports, tank farms for the storage of flamable liquids, nuclear power plants);

(2) Natural, including:

(a) Ocean erosive areas;

(b) Estuarine erosive areas;

(c) Flood hazard areas
- Riverine (floodplains and floodways)
- Non-Riverine;

(b) Areas with Soil Limitations, including the following:

(1) Areas prsenting hazards for foundations;

(2) Shallow soils;

(3) Poorly drained soils;

(4) Areas with limitations for septic tanks including both:

(a) areas that are generally characterized by soil limitations, but within which small pockets of favorable soils do exist and

(b) areas where soil limitations are common to most of the soils present.

(c) Sources of Water Supply, including:

(1) Groundwater recharge areas (Bedrock and Surficial);

(2) Public water supply watersheds;

(3) Well fields.

(d) Areas where the predominant slope exeeds twelve percent.

2) Fragile Areas

An identification shall be made of those areas which could easily be damaged or destroyed by inappropriate or poorly planned development.

The following shall be considered:

(a) Wetlands

(b) Frontal Dunes

(c) Beaches

(d) Prime Wildlife Habitats

(e) Scenic and Prominent High Points

(f) Unique Natural Areas

(g) Estuarine Waters

(h) Other Surface Waters (Rivers, lakes, streams, etc.)

3) Areas with Resource Potential, including:

(a) Archeologic and historic sites

(b) Productive and unique agricultural lands, including:
- Prime agricultural soils
- Potentially valuable agricultural lands with moderate conservation efforts
- Other productive or unique agricultural lands

(c) Potentially valuable mineral sites

(d) Publicly owned forests, parks, fish and game lands, and other non-intensive outdoor recreation lands.

(e) Privately owned wildlife sanctuaries.

b. Capacity of Community Facilities

An identification shall be made of:

(1) Existing water and sewer service areas;

(2) The design capacity of the existing water treatment plant, sewage treatment plant, schools, and primary roads;

(3) The percent at which the existing water treatment plant, sewage treatment plant, schools, and primary roads are currently utilized.

3) Estimated Demand

a. Population and Economic Estimates

Population: A population estimate for the following ten years shall be made and utilized as the basis for

determining land and facilities demand and for classifying land areas. Ten year population projections will be provided by the Department of Administration for use in making population estimates. Projections will be provided for counties and cities and towns having a population greater than 2500. Accurate projections for those areas with a population of less than 2500 are not available and must be developed by the local planning unit.

The projections provided by the Department of Administration are based on prior trends with annual updates. The local government may wish to use these trend projections as their population estimates or to modify them to include additional factors such as:

1) Seasonal population;
2) Local objectives concerning growth;
3) Foreseeable social and economic change.

The Department of Administration population model is capable of taking into account some of these considerations, and should be used where possible when such further refinement is desired. If such refinement causes a significant difference between the Department of Administration population projections and the local population estimate, the Coastal Resources Commission or its designee should review the estimate prior to the local government using it in their land use plan.

Economy: Major identifiable trends or factors in the economy which might have impact on future land use shall be set forth.

b. Future Land Needs

The steps to be followed in determining future land needs are:

1) To make an allocation of the estimated population growth to the Transition, Community, and Rural land classes of the Land Classification System, based on local objectives (for further clarification see Section II-D). The Transition class is to be used to accommodate all the estimated moderate to high density growth. That is not to say, however, that growth cannot occur in the Developed class. The great majority of the low density growth which is estimated should be clustered in the Community class, though a small amount can be accommodated at very low densities in the Rural class.

2) To determine, for the Transition and Community classes, the land area required to accommodate the estimated growth based upon the following gross population desnities (for further clarification see Section II-D):

Transition: a minimum of 2000 people per square mile

Community: as a rule of thumb, 640 people per square mile (one person per acre).

c. Community Facilities Demand

Consideration should be given to new facilities which will be required by the estimated population growth.

D. Land Classification

1. Introduction

A land classification map shall be prepared according to the specifications set forth in this section. The following color codes shall be used:

Developed	Solid rust
Transition	Wide spaced hatched rust
Community	Close spaced cross-hatched rust
Rural	White
Conservation	Solid green

The North Carolina Land Classification System contains five classes of land:

a. Developed--Lands where existing population density is moderate to high and where there are a variety of land uses which have the necessary public services.

b. Transition--Lands where local government plans to accommodate moderate to high density development during the following ten year period and where necessary public services will be provided to accommodate that growth.

c. Community--Lands where low density development is grouped in existing settlements or will occur in such settlements during the following ten year period and which will not require extensive public services now or in the future.

d. Rural--Lands whose highest use is for agriculture, forestry, mining, water supply, etc., based on their natural resources potential. Also, lands for future needs not currently recognized.

e. Conservation--Fragile, hazard and other lands necessary to maintain a healthy natural environment and necessary to provide for the public health, safety, or welfare.

These five classes provide a framework to be used by local governments to identify the general use of all lands in

each county. Such a system presents an opportunity for the local government to provide for its needs as well as to consider those of the whole state. Also, they can make a statement of policy on where and to what density they want growth to occur, and where they want to conserve the county's natural resources by guiding growth.

As a statement of local policy consistent with statewide needs and goals, the county land classification map will serve as a basic tool for coordinating numerous policies, standards, regulations, and other governmental activities at the local, state and federal level. Such coordination may be described by five applications:

a. The Land Classification System encourages coordination and consistency between local land use policies and those of the State Government. Lands are classified by the local governments. The Coastal Resources Commission then reviews those classifications to ensure conformance with minimum guidelines for the system. The coastal county maps taken together will be the principal policy guide for governmental decisions and activities which affect land uses in the coastal area.

b. The System provides a guide for public investment in land. For example, state and local agencies can anticipate the need for early acquisition of lands and easements in the Transition class for schools, recreation, transportation, and other public facilities.

c. The System can also provide a useful framework for budgeting and planning for the construction of community facilities such as water and sewer systems, schools, and roads. The resources of many state and federal agencies, as well as those of the local government which are used for such facilities, can then be more efficiently allocated.

d. In addition, such a System will aid in better coordination of regulatory policies and decisions. Conservation and Rural Production lands will help to focus the attention of state and local agencies and interests concerned with the valuable natural resources of the state. On the other hand, lands in the Transition and Community classes will be of special concern to those agencies and interests who work for high quality development through local land use controls such as zoning and subdivision regulations.

e. Finally, the System can help to provide guidance for a more equitable distribution of the land tax burden. Private lands which are in the Rural and Conservation classes should have low taxes to reflect the policy that few, if any, public services will be provided to these lands. In contrast, lands in the Transition class should be taxed to pay for the large cost of new public services which will be required to support the density of growth anticipated.

The local land classification maps must be updated every five years. Each class is designed to be broad

enough so that frequent changes in maps are not necessary. In extreme cases, such as when a large key facility, causing major repercussions, is unexpectedly placed in a county, the Coastal Resources Commission can allow a county to revise its classification map before the five year period is over.

In addition, the Land Classification System allows a variety of detailed land uses such as residential, commercial, industrial, recreational, etc. to occur within these classes and there is flexibility under existing zoning enabling statutes to change these detailed land uses whenever necessary.

Policies, rules, and actions concerning Areas of Environmental Concern shall take precedence over policies, rules, and actions concerning the Land Classifications, in the event of any conflicts.

2. The Five Classes

a. Developed

Purpose: The Developed class identifies developed lands which are presently provided with essential public services. Consequently, it is distinguished from areas where significant growth and/or new service requirements will occur. Continued development and redevelopment should be encouraged to provide for the orderly growth in the area.

Description: Developed lands are areas with a minimum gross population density of 2,000 people per square mile. At a minimum, these lands contain

existing public services including water and sewer systems, educational systems, and road systems -- all of which are able to support the present population and its accompanying land uses including commercial, industrial, and institutional.

b. Transition

Purpose: The Transition class identifies lands where moderate to high density growth is to be encouraged and where any such growth that is permitted by local regulation will be provided with the necessary public services.

Description: The area to be designated as Transition must be no greater than that required to accommodate the estimated county population growth at a minimum gross density of 2,000 people per square mile. For example, if the population increase for the following ten year period is projected to be 10,000 people, and it is planned that 8,000 of them will be accommodated in the Transition area, then no more than four square miles of Transition area should be shown. In addition, the minimum services which will be required are the necessary water and sewer facilities, educational services, and roads. Consideration must be given to the cost of public services in the Transition area. Each local government is encouraged to estimate the approximate cost of providing public services where they do not already exist.

Lands to be classified Transition should be considered in the following order:

1) First priority is for lands which presently have a gross population density of more than 2,000 people per square mile, but do not qualify as Developed because they lack the necessary minimum public services. These areas may not be expected to accommodate additional population, but they will require funds for services to avoid public health and safety problems.
2) Second priority is for lands that have all the necessary public services in place, but which lack the minimum gross population density of 2,000 people per square mile needed to qualify the area as Developed. These areas therefore have not utilized the capacity of the existing services.
3) Additional lands necessary to accommodate the remainder of the estimated Transition growth for the ten year planning period.

In choosing lands for the Transition class, such lands should <u>not</u> include:

1) Areas with severe physical limitations for development with public services.
2) Lands which meet the definition of the Conservation class.
3) Lands of special value such as the following unless no other reasonable alternative exists:
   (a) Productive and unique agricultural lands;
   (b) Productive forest lands;
   (c) Potentially valuable mineral deposits;
   (d) Potential aquifers and key parts of water supply watersheds;
   (e) Scenic and tourist resources;
   (f) Habitat for economically valuable wildlife species;
   (g) Flood fringe lands;
   (h) Open coast flood hazard areas, exclusive of ocean erosive areas;
   (i) Estuarine flood hazard areas, exclusive of estuarine erosive areas.

c. Community

Purpose: The Community class identifies existing and new clusters of low density development not requiring major public services.

Description:

1) The Community class includes existing clusters of one or more land uses such as a rural residential subdivision or a church, school, general store, industry, etc. (Cluster is defined as a number of structures grouped together in association or in physical proximity - Webster's Dictionary).

2) This class will provide for all new rural growth when the lot size is ten acres or less. Such clusters of growth may occur in new areas, or within existing community lands. In choosing lands for Community growth, such lands should not include:

   (a) Areas with severe physical limitations for development;

   (b) Areas meeting the definition of the Conservation class;

   (c) Lands of special value such as the following unless no other reasonable alternative exists:

      (1) Productive and unique agricultural lands;

      (2) Productive forest lands;

      (3) Potentially valuable mineral deposits;

      (4) Potential aquifers and key parts of water supply watersheds;

      (5) Scenic and tourist resources;

      (6) Habitat for economically valuable wildlife species;

      (7) Flood fringe lands

      (8) Open coast flood hazard areas, exclusive of ocean erosive areas;

      (9) Estuarine flood hazard areas, exclusive of estuarine erosive areas.

3) New development in the Community class areas will be subject to subdivision regulations under the Enabling Subdivision Act (G.S. 153A-340 et.seq.)

4) In every case, the lot size must be large enough to safely accommodate on-site sewage disposal and where necessary water supply so that no public sewer services will be required now or in the future.

5) Limited public services should be provided in the Community class such as public road access and electric power.

6) As a guide for calculating the amount of land necessary to accommodate new rural community growth, a gross population density of 640 people per square mile or one person per acre should be used. For example, if 1,000 new people are expected to settle in low density clusters during the following ten year period, then roughly 1,000 acres of land should be allocated for new growth in Community class areas.

d. Rural

Purpose: The Rural class identifies lands for long-term management for productive resource utilization, and where limited public services will be provided. Development in such areas should be compatible with resource production.

Description: The Rural class includes all lands not in the Developed, Transition, Community and Conservation classes.

e. Conservation

Purpose: The Conservation class identifies land which should be maintained essentially in its natural state and where very limited or no public services are provided.

Description: Lands to be placed in the Conservation class are the least desirable for development because:

1) They are too fragile to withstand development without losing their natural value and/or;

2) They have severe or hazardous limitations to development and/or;

3) Though they are not highly fragile or hazardous, the natural resources they represent are too valuable to endanger by development.

Such lands at a minimum should include:

1) Fragile

   (a) Wetlands

   (b) Steep slopes and prominent high points

   (c) Frontal dunes

   (d) Beaches

   (e) Surface waters including
   - Lakes and ponds
   - Rivers and streams
   - Tidal waters below mean high water

   (f) Prime wildlife habitat

   (g) Unique natural areas and historic and archaeological sites

2) Hazard

   (a) Floodways

   (b) Ocean erosive areas

   (c) Inlet lands

   (d) Estuarine erosive areas

3) Other

   (a) Publicly owned forest, park, and fish and game lands and other non-intensive outdoor recreation lands

   (b) Privately owned sanctuaries, etc., which are dedicated to preservation

   (c) Publicly owned water supply watershed areas

   (d) Undeveloped key parts of existing water supply watersheds.

   (e) Potential water impoundment sites

In addition to the above named types of land, a county may include other areas to be maintained in

an essentially natural state which are needed to implement their stated policy objectives.

E. Areas of Environmental Concern

Local land use plans are required by G.S. 113A-110 to give special attention to the protection and development of Areas of Environmental Concern. Part III of these Guidelines specifies the treatment AECs are to receive in the local plan.

III. GUIDELINES FOR AREAS OF ENVIRONMENTAL CONCERN

1.0. Introduction

The Coastal Area Management Act of 1974 requires that these State Guidelines "shall give particular attention to the nature of development which shall be appropriate within the various types of Areas of Environmental Concern that may be designated by the Commission."

The Act further provides that local land use plans "shall give special attention to the protection and appropriate development of Areas of Environmental Concern."

The 1974 Legislature found that "the coastal area, and in particular the estuaries, are among the most biologically productive regions of this State and of the nation" but in recent years the area "has been subjected to increasing pressures which are the result of the often conflicting needs of a society expanding in industrial development, in population, and in the recreational aspirations of its citizens."

"Unless these pressures are controlled by coordinated management," the Act states, "the very features of the coast which make it economically, aesthetically, and ecologically rich will be destroyed."

To prevent this destruction the Act charges the Coastal Resources Commission with the responsibility for identifying types of areas, and designating specific areas -- water as well as land -- in which uncontrolled or incompatible development might result in irreparable damage. It further instructs the Commission to determine what types of use or development are appropriate within such areas,

and it calls on local governments to give special attention to these environmentally fragile and important areas in developing their land use plans.

Thus, the Coastal Resources Commission and local government, with the assistance and guidance of the Coastal Resources Advisory Council, share a unique statutory assignment, for this is the first time North Carolina has undertaken such a massive and comprehensive determination of its critical land and water areas. Further, this is an unprecedented opportunity, in that none of the other coastal states has given this authority and responsibility to local government and a locally oriented commission.

Given its own timetable the Commission would have preferred following a more logical sequence in which adoption of Interim Areas of Environmental Concern would have been the first step, followed by preliminary State Guidelines, then adoption of Permanent Areas of Environmental Concern, and finally the preparation of the final State Guidelines in ample time for local governments to consider both the AECs and the Guidelines fully in the process of preparing their land use plans.

The time schedule in the Act, however, requires adoption of these Guidelines before the Commission has had an opportunity to study and designate Interim AECs; and undoubtedly the permanent AECs will not be adopted until after the deadline for completion of the local plans next November.

The Commission has therefore adapted its Guidelines and procedures to this schedule, attempting in this document to identify the various types of potential AECs, and to explain the significance and provide a statement of policy and appropriate land uses for each.

This should enable local governments to give special attention from the outset to the types of Areas of Environmental Concern which may be located within their planning jurisdiction.

Subsequently, with the adoption of Interim AECs, the Commission will provide more detailed information for each county or city.

The Coastal Resources Commission is now considering, but has not adopted, Interim Areas of Environmental Concern. The Secretary of Natural and Economic Resources has submitted to the Commission proposals for Interim AECs covering a total of twelve categories.

These twelve categories, plus ten more, are described in Sections 2.0 to 7.53, below. The ten additional categories were included in the Guidelines in order to furnish counties and cities with a more nearly complete list of the subjects that might ultimately be designated as Interim or Permanent Areas of Environmental Concern.* In preparing their plans for AECs, however, counties and cities are required to plan only for categories that have actually been designated by the Commission as Interim or Permanent AECs.

These Guidelines require that local plans should include the descriptions of Areas of Environmental Concern presented in the sections below. The plan must also include written statements of specific land uses which may be allowed in each of the classes of Areas of Environmental Concern. These specific allowable land uses shall be consistent with the policy objectives and standards of appropriate land uses found in this chapter.

*A few of the statutory categories are not described in the Guidelines because of incomplete information.

The plan shall be sufficiently precise as to the nature of permissible land uses in such areas as to: (1) enable the Coastal Resources Commission to determine if the plan is consistent with these Guidelines; and (2) afford a legal basis for the issuance or denial of development permits in the future.

Local planners should note that there are a few instances where a category of Areas of Environmental Concern may overlap with another. Where this is found to occur, the policy of the Commission is to require the local plan to adopt allowable land uses within the area of overlap consistent with the more restrictive land use standard.

In the following pages Guidelines for AECs are divided into the six, of seven, general categories specified in the Act as being those which the Commission may designate as AECs. As in the Act, some of these contain sub-categories, which are more clearly defined here. The categories are:

Coastal Wetlands - Low Tidal Marshland
Coastal Wetlands - Other Coastal Marshland
Estuarine Waters
Renewable Resource Areas - Watersheds or Aquifers - Small Surface Water Supplies
Renewable Resource Areas - Watersheds or Aquifers Special Aquifer Areas - Outer Banks and Barrier Islands
Fragile, Historic or Natural Resource Areas - Existing National or State Forests
Fragile, Historic or Natural Resource Areas - Existing National or State Parks
Fragile, Historic or Natural Resource Areas - Existing Wildlife Refuges, Preserves or Management Areas Owned by the State of North Carolina or the Federal Government
Fragile, Historic or Natural Resource Areas - Complex Natural Areas

Fragile, Historic or Natural Resource Areas - Areas that Sustain Remnant Species
Fragile, Historic or Natural Resource Areas - Areas Containing Unique Geologic Formations
Fragile, Historic or Natural Resource Areas - Historic Places
Fragile, Historic or Natural Resource Areas - Registered Natural Landmarks
Public Trust Areas - Public Trust Waters
Natural Hazard Areas - Sand Dunes Along the Outer Banks
Natural Hazard Areas - Ocean Beaches and Shorelines (on the Outer Banks)
Natural Hazard Areas - Floodways
Natural Hazard Areas - River Flood plains
Natural Hazard Areas - Coastal Flood plains
Natural Hazard Areas - Excessive Erosion Areas - Coastal Inlet Lands
Natural Hazard Areas - Excessive Erosion Areas - Ocean Erodible Areas
Natural Hazard Areas - Excessive Erosion Areas - Estuarine and Sound and River Erodible Areas

2.0. Coastal Wetlands - General

Coastal wetlands are defined as "any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides (whether or not the tide waters reach the marshland areas through natural or artificial watercourses), provided this shall not include hurricane or tropical storm tides. Salt marshland or other marsh shall be those areas upon which grow some, but not necessarily all, of the following salt marsh and marsh plant species: Smooth or salt water Cordgrass (Spartina alterniflora); Black Needlerush (Juncus roemerianus); Glasswort (Salicornia spp.); Salt Grass (Distichlis Spicata); Sea Lavender (Limonium spp.); Bulrush (Scirpus spp.); Saw Grass (Cladium Jamaicense); Cat-Tail (Typha spp.); Salt-Meadow Grass (Spartina patens); and Salt Reed Grass (Spartina cynosuroides)." Included in this statutory definition of wetlands is "such contiguous land as the Secretary of NER reasonably deems necessary to affect by any such order in carrying out the purposes of this Section." (G.S. 113-230(a))

For policy purposes, coastal wetlands may be considered in two categories: (1) low tidal marsh; (2) other coastal marshlands which have different significance and policy implications.

2.1. Coastal Wetlands - Low Tidal Marshland

a. Description. Defined as marshland consisting primarily of Spartina alterniflora and usually subject to inundation by the normal rise and fall of lunar tides

b. Significance. Low tidal marshland serves as a critical component in the coastal ecosystem. The marsh is the basis for the high net yield system of the estuary through the production of organic detritus (partially decomposed plant material) which is the primary input source for the food chain of the entire estuarine system. Estuarine dependent species of fish and shellfish such as menhaden, shrimp, flounder, oysters and crabs currently make up over 90 percent of the total value of North Carolina's commercial catch.

In addition, the roots and rhizomes of the Spartina alterniflora serve as waterfowl food and the stems as wildlife nesting material. Low tidal marsh also serves as the first line of defense in retarding shoreline erosion. The plant stems and leaves tend to dissipate wave action while the vast network of roots resists soil erosion. Marshes of this type operate additionally as traps for sediment originating from upland runoff thus reducing siltation of the estuarine bottoms and consequent detriment to marine organisms.

c. Policy Objective. To give the highest priority to the preservation of low tidal marshland.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective. These marshes should be considered unsuitable for all development which will alter

their natural functions. Inappropriate land uses include, but are not limited to the following examples: restaurants and businesses; residences, apartments, motels, hotels, and trailer parks; parking lots and offices; spoil and dump sites; wastewater lagoons; public and private roads and highways; and factories. Examples of acceptable land uses may include utility easements, fishing piers, docks, certain agricultural uses except when excavation or filling affecting estuarine or navigable waters is involved, and such other uses which do not significantly alter the natural functions of the marsh.

2.2. Coastal Wetlands - Other Coastal Marshland

a. Description. All other marshland which is not low tidal marshland and which contains the species of vegetation as listed in paragraph 2.0.

b. Significance. This marshland type also contributes to the detritus supply necessary to the highly productive estuarine system essential to North Carolina's economically valuable commercial and sports fisheries

The higher marsh types offer quality wildlife and waterfowl habitat depending on the biological and physical conditions of the marsh. The vegetative diversity in the higher marshes usually supports a greater diversity of wildlife types than the limited habitat of the low tidal marsh. This marshland type also serves as an important deterrent to shoreline erosion especially in those marshes containing heavily rooted species. The dense system of rhizomes and roots of Juncus roemerianus are highly resistant to erosion. In addition, the higher marshes are effective sediment traps.

c. Policy Objectives. To give a higher priority to the preservation and management of the marsh so as to safeguard and perpetuate their biological, economic and aesthetic values

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective. Highest priority shall be allocated to the conservation of existing marshlands. Second priority for land use allocation of this type shall be given to development which requires water access and cannot function anywhere else, such as ports, docks and marinas, provided that the actual location of such facilities within the marsh consider coastal, physical and biological systems and further provided that feasible alternatives regarding location and design have been adequately considered and need for such development can be demonstrated. Such allocation may only be justified by the projected land use demands and by community development objectives, but in no case shall the allocation exceed the capacity of the marshland system to sustain losses without harm to the estuarine ecosystem.

3.0. Estuarine Waters

a. Description. Estuarine waters are defined in G.S. 113-229(n)(2) as, "all the water of the Atlantic Ocean within the boundary of North Carolina and all the waters of the bays, sounds, rivers, and tributaries thereto seaward of the dividing line between coastal fishing waters and inland fishing waters, as set forth in an agreement adopted by the Wildlife Resources Commission and the Department of Conservation and Development filed with the Secretary of State entitled 'Boundary Lines, North Carolina Commercial Fishing - Inland Fishing Waters, revised March 1, 1965,'" or as it may be subsequently revised by the Legislature.

b. Significance. Estuaries are among the most productive natural environments of North Carolina. They not only support valuable commercial and sports fisheries, but are also utilized for commercial navigation, recreation, and aesthetic purposes. Species dependent upon estuaries such as menhaden, shrimp, flounder, oysters and crabs make up over 90 percent of the total value of North Carolina's commercial catch. These species must spend all or some part of their life cycle in the estuary. The high level of commercial and sports fisheries and the aesthetic appeal of Coastal North Carolina is dependent upon the protection and sustained quality of our estuarine areas.

c. Policy Objective. To preserve and manage estuarine waters so as to safeguard and perpetuate their biological, economic, and aesthetic values.

d. Appropriate Uses. Appropriate uses shall be those consistent with the above policy objective. Highest priority shall be allocated to the conservation of estuarine waters. The development of navigational channels, the use of bulkheads to prevent erosion, and the building of piers or wharfs where no other feasible alternative exists are examples of land uses appropriate within estuarine waters, provided that such land uses will not be detrimental to the biological and physical estuarine functions and public trust rights. Projects which would directly or indirectly block or impair existing navigation channels, increase shoreline erosion, deposit spoils below mean high tide, cause adverse water circulation patterns, violate water quality standards, or cause degradation of shellfish waters are generally considered incompatible with the management of estuarine waters.

4.1. Renewable Resource Areas - Watersheds or Aquifers - General

Public water supply watersheds or aquifers are defined as areas that are present sources of public water supply, as identified by the N. C. Commission for Health Services or Environmental Management Commission, or that are classified for water supply pursuant to G.S. 143-214.1.

4.11. Renewable Resource Areas - Watersheds or Aquifers - Small Surface Water Supplies

a. Description. Defined as relatively small watersheds or catchment areas which contain a stream(s) classfied A-I or A-II by the Environmental Management Commission.

b. Significance. Small water supply watersheds represent a source of potable water for a locality or region. Any loss or serious detriment to such an area would have serious public health implications. Such a loss would also have a significant adverse financial impact.

Uncontrolled development within the watershed would cause significant changes in the runoff patterns and would affect the quantity of water available as a raw water supply. Such development would also adversely affect water quality by introducing a wide variety of pollutants from homes, businesses, or industries, either through discharge or surface runoff into the water supply.

c. Policy Objective. To insure the continued maintenance of water quality and quantity of the surface water supply.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective.

4.12. Renewable Resource Areas - Watersheds or Aquifers - Special Aquifer Areas - Outer Banks and Barrier Islands

a. Description. Areas of well drained sands that extend downward from the surface to include an extensive area of fresh water that is an important source for a public water supply identified by the North Carolina Department of Human Resources, Division of Health Services or that are classified for water supply use pursuant to G.S. 143-214.1. These areas will be identified by the Division of Health Services in cooperation with the State Geologist.

b. Significance. Naturally occurring aquifers on the outer banks and barrier islands generally occur in well drained sands at relatively shallow depth. Recharge to these aquifers is through precipitation and, occasionally, indirectly from adjoining fresh-water marshlands. Very little filtration of chemical contaminants or of viruses is afforded by the sand materials, and the potential exists for extensive pollution of these supplies rendering them unsafe as sources of public water supply. Additionally, a rate of water withdrawal that greatly exceeds water recharge from the surface can result in saltwater intrusion rendering all or part of the aquifer unsuitable as a water supply source.

c. Policy Objective. To limit as nearly as possible the potential for contamination of special aquifer areas that may result in a public health hazard or significantly limit the value of the aquifer as water supply source.

d. Appropriate Land Use. Appropriate land uses shall be those consistent with the above policy objective. Special aquifer areas shall be planned for those kinds of development

that will not rely upon subsurface waste disposal systems, result in injection of wastes into the ground, significantly increase the risk of accidental discharge onto the surface of liquid or other easily soluable contaminants, or increase the withdrawal of water from the aquifer to a rate that may cause saltwater intrusion. Inappropriate uses would include chemical or fuel processing or storage facilities or residential development employing septic tank sewage disposal system. These AECs should be planned for low intensity of use where feasible, and new intensive development that must occur should be provided with public waste water disposal systems.

5.0. Fragile, Historic or Natural Resource Areas - General

Fragile or historic areas, and other areas containing environmental or natural resources of more than local significance, where uncontrolled or incompatible development could result in major or irreversible damage to important historic, cultural, scientific or scenic values or natural systems.

5.1. Fragile, Historic or Natural Resource Areas - Existing National or State Forests.

a. Description. Existing sites that have been acquired for use as national or state forests, as identified by the Secretary of Natural and Economic Resources.

b. Significance. Existing national or state forests are areas containing natural resources of more than local significance where uncontrolled or incompatible development could result in major or irreversible damage to important natural values or resources. National forests act in a multiple-use

capacity for natural resources including timber, wildlife, grazing, water, and minerals. Additionally, national forests provide recreational, cultural, scientific and scenic values.

c. Policy Objective. To allow only limited development necessary to utilize natural resources consistent with those management procedures which do not cause irreversible damage to natural systems.

d. Appropriate Land Uses. Appropriate land uses shall be those that are consistent with the above stated policy objectives. All development shall be planned and executed so as to in no way impair, damage, or detract from the values for which the areas were established to preserve, protect, and/or utilize.

5.2. Fragile, Historic or Natural Resource Areas - Existing National or State Parks.

a. Description. Defined as existing sites that have been acquired for use as national or state parks, as identified by the Secretary of Natural and Economic Resources.

b. Significance. Existing national or state parks are areas containing environmental or natural resources of more than local significance where uncontrolled or incompatible development could result in major or irreversible damage to important historic, cultural, scientific, or scenic values, or natural systems, or would be detrimental to the recreational uses of natural systems. These sites provide: (1) areas of unique or scenic value; (2) recreational uses of natural resources; (3) portrayal and interpretation of plant and animal life, geology

and natural features; and (4) preservation of scientific sites and natural areas of statewide importance.

c. Policy Objective. To protect and preserve the scenic, historic, cultural, scientific and natural values of national or state parks.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective. All development in parks shall be planned and executed so as to in no way impair, damage or detract from the values which the areas were established to preserve and protect. In parks or parts of parks that do not contain natural areas or scientific sites, facilities for such outdoor activities as picnicking, swimming, boating, fishing, hiking, nature study and camping; and facilities normally associated with simple play fields incident to picnicking and organized camping are examples of appropriate land uses. Facilities for recreational activities such as organized sports and athletic contests are examples of inappropriate uses. In parks or parts of parks containing natural areas of scientific sites, minimum developed paths and trails are examples of appropriate land uses. Facilities for recreational activities such as swimming, camping, picnicking, and the like are examples of inappropriate land uses.

5.3. Fragile, Historic or Natural Resource Areas - Existing Wildlife Refuges, Preserves or Management Areas Owned by the State of North Carolina or by the Federal Government.

a. Description. Title is self-explanatory.

b. Significance. These lands representing significant acreage in essentially natural conditions, are an important public resource essential in the protection and management of wildlife for recreational, scientific and educational purposes.

c. Policy Objective. To preserve and maintain these areas consistent with the wise management of wildlife populations for consumptive and non-consumptive uses.

d. Appropriate Land Uses. Appropriate land uses are those consistent with the above stated policy objective. The production and management of wildlife is to be of top priority for these lands. This involves habitat improvement, including timber management in a manner consistent with the wildlife management program, and planned hunter harvest. Second priority is to be given to recreational and scientific uses such as hiking, boating and wildlife observation, which are judged to be consistent with the wildlife management system.

5.4. Fragile, Historic or Natural Resource Areas - Complex Natural Areas.

a. Description. Complex natural areas are defined as lands that support native plant and animal communities and provide habitat conditions or characteristics that have remained essentially unchanged by human activity. Such areas are surrounded by landscapes that have been modified but that do not drastically alter the conditions within the natural areas or their scientific or educational value. Such areas will be determined by the Commission, after consideration of written reports or testimony of competent experts, to be rare within

a county or to be of particular scientific or educational value.

b. Significance. Complex natural areas provide the few remaining examples of conditions that existed within the coastal area prior to settlement by Western man. Often these natural areas provide habitat conditions suitable for rare or endangered species or they support plant and animal communities representative of pre-settlement conditions. These areas help provide a historical perspective to changing natural conditions in the coastal area and together are an important and irreplaceable scientific educational resource.

c. Policy Objective. To preserve the natural conditions of the site so as to safeguard its existence as an example of naturally occurring, relatively undisturbed plant and animal communities of major scientific or educational value.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective. Lands within the AEC shall not be planned for uses or kinds of development that will unnecessarily jeopardize the natural or primitive character of the natural area directly or indirectly through increased accessibility. Additionally, lands adjacent to the complex natural area should not be planned for additional development that would unnecessarily endanger the recognized value of the AEC. The variability between kinds of complex natural areas and between land uses adjacent to those natural areas means that the range of permissible uses and intensity of use must be carefully tailored to the individual area.

5.5. Fragile, Historic or Natural Resource Areas - Areas that Sustain Remnant Species.

a. Description. Areas that sustain remnant species are those places that support native plants or animals, rare or endangered, within the coastal area. Such places provide habitat conditions necessary for the survival of existing populations or communities of rare or endangered species within the county. Determination will be by the Commission based upon accepted lists published by the State or Federal Government and written reports or testimony of competent experts indicating that a species is rare or endangered within the coastal area.

b. Significance. The continued survival of certain native plants and animals in the coastal area that are now rare or endangered cannot be assured unless the relatively few well defined areas providing necessary habitat conditions are protected from development or land uses that might alter these conditions. These habitats and the species they support provide a valuable educational and scientific resource.

c. Policy Objective. To preserve habitat conditions necessary to the continued survival of rare or endangered native plants and animals and minimize development or land uses that might jeopardize known areas that support remnant species.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective. Lands within the AEC shall not be planned for uses or kinds of development that will unnecessarily jeopardize the habitat conditions responsible for the continued survival of the respective plants or animals.

5.6. Fragile, Historic or Natural Resource Areas - Areas Containing Unique Geological Formations

a. Description. Areas containing unique geological formations will be identified by the State Geologist. These places contain surface or near surface formations that are either themselves unique or are especially unusual or notable examples of geologic formations or processes in the coastal area.

b. Significance. Unique geological areas provide surface or near surface exposures of unique geologic formations or processes of the coastal area. They are important educational, scientific, or scenic resources that would be jeopardized by uncontrolled or incompatible development.

c. Policy Objective. To preserve the scientific, educational or scenic values of unique geological formations so that they may be available for future study and enjoyment.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective. Uses within areas containing unique geological formations shall be tailored to the particular unique qualities of the individual area.

5.71. Fragile, Historic or Natural Resource Areas - Historic Places.

a. Description. Defined as historic places that are listed, or have been approved for listing by the North Carolina Historical Commission, in the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966; historical, archaeological, and other places and properties

owned, managed, or assisted by the State of North Carolina pursuant to G.S. 121; and properties or areas that are or may be designated by the Secretary of the Interior as National Historic Landmarks.

b. Significance. Historic resources are both non-renewable and fragile. They owe their significance to their association with American history, architecture, archaeology, and culture. Properties on or approved for the National Register of Historic Places may be of national, state, or local significance.

c. Policy Objective. To protect and/or preserve the integrity of districts, sites, buildings, and objects in the above categories.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above stated policy objective. Land use which will result in substantial irreversible damage to the historic value of the area is inappropriate.

5.72. Fragile, Historic or Natural Resource Areas - Registered Natural Landmarks.

a. Description. Defined as properties or areas that are or may be designated by the Secretary of the Interior as Registered Natural Landmarks.

b. Significance. Registered Natural Landmarks are true, accurate, essentially unspoiled examples of natural areas which possess exceptional value or quality in illustrating or interpreting the natural heritage of our nation. These areas (1) encourage the preservation of sites illustrating the geological

and ecological character of the United States, (2) enhance the educational and scientific value of sites thus preserved, (3) strengthen cultural appreciation of natural history, and (4) foster a greater concern in the conservation of the nation's natural heritage.

c. Policy Objective. To maintain intact Registered Natural Landmarks and the resource values for which they received recognition of national significance.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above stated policy objective. Continuing integrity is the essential element in development and maintenance of Natural Landmarks. Reference to the original landmark application and description, as described in the National Landmark Program, is essential to evaluate continuing integrity. Developments which dilute the quality of the landmark so that it no longer meets the test of integrity are considered inappropriate land uses.

6.1. Public Trust Areas - Public Trust Waters.

a. Description. Ocean and estuarine waters plus coastal streams, tributaries and lakes in which the public may have rights of navigation, access or other public trust rights (G.S. 113A-113(b)(5)).

b. Significance. The public has rights in these waters including navigation and recreation. In addition, these waters support valuable commercial and sports fisheries and have aesthetic value.

c. Policy Objective. To protect public rights for

navigation and recreation and to preserve and manage the public trust waters so as to safeguard and perpetuate their biological, economic and aesthetic value.

d. Appropriate Uses. Appropriate uses shall be those consistent with the above policy objective. Any land use which interferes with the public right of navigation, or other public trust rights, which the public may be found to have in these waters, shall not be allowed. The development of navigational channels, the use of bulkheads to prevent erosion, and the building of piers or wharfs are examples of land uses appropriate within public trust waters provided that such land uses will not be detrimental to the biological and physical functions and public trust rights. Projects which would directly or indirectly block or impair existing navigation channels, increase shoreline erosion, deposit spoils below mean high tide, cause adverse water circulation patterns, violate water quality standards, or cause degradation of shellfish waters are generally considered incompatible with the management of public trust waters.

7.0. Natural Hazard Areas - General.

Natural hazard areas where uncontrolled or incompatible development could unreasonably endanger life or property, and other areas especially vulnerable to erosion, flooding, or other adverse effects of sand, wind, and water.

7.1. Natural Hazard Areas - Sand Dunes along the Outer Banks

a. Description. (Synonym - dunelands) Defined as sand deposits of windblown (eolian) origin, whether barren or partly or wholly vegetated with grasses, herbs, vines, or woody plants.

The dunelands extend from the inland perimeter of the ocean beach to the line of estuarine water encroachment on the sound side of the outer banks.

b. Significance. Dunelands comprise a major portion of the outer banks and barrier islands and represent a protective barrier for the sounds, estuaries, and mainland. These sand deposits represent a dynamic system that does not afford long term protection for development. Development with inadequate design or construction may be subject to substantial damage due to the adverse effects of wind and water.

c. Policy Objective. To insure that development which is undertaken utilizes sound engineering practices to minimize the erosive effects of wind and water.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective. Only those developments that can be safely undertaken utilizing recognized engineering practices and site preparation and site maintenance to minimize unnecessary damage from wind and water should be allowed.

7.2. Natural Hazard Areas - Ocean Beaches and Shorelines (on the Outer Banks)

a. Description. These are defined as land areas without vegetation covering, consisting of unconsolidated soil material that extends landward from the mean low tide to a point where any one or combination of the following occur: (1) vegetation or (2) a distinct change in predominant soil particle size or (3) a change in slope or elevation which alters the physiographic land form, and thus constitutes the transition into dunes or wetlands.

b. Significance. Sand deposits of ocean beaches and shorelines represent a dynamic zone which does not afford long

term protection for development. The nature of tidal action and the force of storms is such that they cause the beach areas to constantly shift. Littoral drift is a natural phenomenon whereby sand is removed from beaches by wave action and littoral currents and is deposited upon a different stretch of the beach. The action also shifts the line of high tide and low tide. Ocean beaches and shorelines are valuable for public and private recreation and are located within a natural hazard area. Development within this dynamic zone may result in loss of property and possible loss of life.

c. Policy Objective. To preserve to the greatest extent feasible the opportunity to enjoy the physical, aesthetic, cultural and recreational qualities of the natural shorelines of the state and to allow that type development which will withstand the prevalent natural forces and not unreasonably interfere with the rightful use and enjoyment of the beach area.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective. Land use which involves permanent or substantial construction would not be appropriate.

7.3. Natural Hazard Areas - Floodways

a. Description. Floodway is defined as the channel and that portion of the floodplain of a stream determined to provide passage for the 100-year flood without increasing the elevation of that flood at any point by more than one foot.

b. Significance. Floodways serve as the main channel for the passage of flood waters. Development within the floodway may increase the potential of flood damage and unreasonably endanger

life and property.

c. Policy Objective. To protect the public health, safety and welfare by restricting land uses within the floodway which have a significant potential to increase flood damage or cause loss of life.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective. In all instances, land uses must conform to the guidelines set forth in Chapter X - Federal Insurance Administration, Subchapter B - National Flood Insurance Program, Part 1910 - Criteria for Land Management and Use, 1910. 3d. In developing local land use plans, however, first priority should be given to those non-intensive recreational, rural and conservation uses listed in G.S. 143-215.54.

7.41. Natural Hazard Areas - River Flood plains

a. Description. River flood plain is defined as a land area adjoining a river, stream or watercourse which is likely to be flooded once every one hundred (100) years (i.e., that has a one percent chance of being flooded each year).

b. Significance. Floodplains store floodwaters, thereby reducing inundation of adjacent lands. Floodplains also absorb and dissipate the energy of floodwaters, thereby reducing down-stream destruction.

c. Policy Objective. To protect the public health, safety and welfare by restricting land uses within the floodplain which have a significant potential to increase flood damage and cause loss of life.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective. In all instances, land uses must conform to the guidelines stated in Chapter X - .

Federal Insurance Administration, Subchapter B - National Flood Insurance Program, Part 1910 - Criteria for Land Management and Use, 1910. 3c.

7.42. Natural Hazard Areas - Coastal Floodplains

a. Description. Coastal flood plain is defined as the land areas adjacent to coastal sounds, estuaries or the ocean which are prone to flooding from storms with an annual probability of one percent or greater (100 year storm) as identified by the State Geologist. These areas are analogous to the 100 year flood plain on a river.

b. Significance. Coastal flood plains are those lands subject to flooding or wave action during severe storms or hurricanes. They are lands where uncontrolled, incompatible, or improperly designed buildings, structures, facilities, and developments can unreasonably endanger life and property. Except for those portions of the areas lying within estuarine or ocean erodible areas, they are not generally or necessarily subject to severe erosion or dynamic action leading to replacement of the land with a body of water. Unlike riverine floodways, structures within this area do not obstruct the flow of flood waters or create any additional back waters.

c. Policy Objective. To ensure that all buildings, structures, facilities and developments are properly designed and built to maintain their stability, integrity, and safety in the event of flood surge from a 100 year storm.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective. It is reasonable to allow a certain degree of development if it is carefully controlled

and meets stringent engineering standards for stability, integrity, and safety during a 100 year storm. The land use plan may allow development activities, and if such development is undertaken, as a minimum it must conform with the standards of the Federal Insurance Administration for coastal high hazard areas and safety during the flood surge from a 100 year storm. (Code of Federal Regulations, Title 24, Chapter 10, Subchapter B).

7.50. Natural Hazard Areas - Excessive Erosion Areas - General

Areas where geologic and soil conditions are such that there is substantial possibility of excessive erosion or seismic activity, as identified by the State Geologist.

7.51. Natural Hazard Areas - Excessive Erosion Areas - Coastal Inlet Lands

a. Description. Defined as the natural zone of migration of coastal inlets. Such a zone covers all areas that are expected to be eroded by future inlets and inlet migration as identified by the State Geologist based on scientific determinations using the best available studies, including relevant historical photography and survey maps.

b. Significance. The particular location of the inlet channel is a temporary one, as such channels are subject to extensive migration. Coastal inlet lands are extremely dynamic land areas that are highly susceptible to becoming completely displaced by water.

c. Policy Objective. To limit unnecessary hazards to life or property or unreasonable requirements for public expenditures to protect property or maintain safe conditions.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective. Recreational or conservation activities and easements for access represent the preferred land use. Moveable temporary structures for recreational purposes may be appropriate. Permanent or substantial residential, commercial, institutional, or industrial structures are not appropriate uses in coastal inlet lands.

7.52. Natural Hazard Areas - Excessive Erosion Areas - Ocean Erodible Areas

a. Description. Defined as the area bounded by mean high water and a recession line within which area excessive erosion has a high probability of occurring. Such a recession line shall be located by the State Geologist in incremental steps of 25, 50 and 100 years. Final determination of the excessive erosion area shall be made by the Commission.

b. Significance. Ocean erodible areas are extremely dynamic lands highly susceptible to becoming completely displaced by water.

c. Policy Objective. To limit unnecessary hazards to life or property or unreasonable requirements for public expenditures to protect property or maintain safe conditions.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective.

7.53. Natural Hazard Areas - Excessive Erosion Areas - Estuarine and Sound and River Erodible Areas

a. Description. Defined as the land area extending from the mainland-water interface landward to a prediction line

indicating the probable shoreline location 100 years hence, as identified by the State Geologist.

b. Significance. The estuarine and sound and river erodible areas are natural hazard areas especially vulnerable to erosion. Development within this type AEC is subjected to the damaging process of erosion unless special development standards and preventive measures are employed.

c. Policy Objective. To insure that development occurring within the 100-year erodibility line is compatible with the dynamic nature of the erodible lands thus minimizing the likelihood of significant loss of property.

d. Appropriate Land Uses. Appropriate land uses shall be those consistent with the above policy objective. Permanent or substantial residential, commercial, institutional or industrial structures are not appropriate uses in estuarine and sound and river erodible areas unless stabilization has been achieved along the effected reach. Recreational, rural and conservation activities represent appropriate land uses in those erodible areas where shoreline protective construction has not been completed.

This is to certify that this is a true copy of the rule by which the State Guidelines for Local Planning in the Coastal Area Under the Coastal Area Management Act of 1974 were duly adopted by the Coastal Resources Commission pursuant to the provisions of G.S. 113A-107(e) on the twenty seventh day of January 1975.

Thomas D. Eure

Thomas D. Eure
Chairman
Coastal Resources Commission

Sworn to and subscribed before me this 27 day of January 1975.

Notary Public

My Commission Expires July 28, 1976